



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,314	04/19/2004	Daiju Yoshino	01306.000125	9821

5514 7590 09/15/2006

FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER

KOHNER, MATTHEW J

ART UNIT PAPER NUMBER

3653

DATE MAILED: 09/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/826,314

Applicant(s)

YOSHINO, DAIJU

Examiner

Matthew J. Kohner

Art Unit

3653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 5/20/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 7,007,948 to Kamiya (*hereinafter* “Kamiya”).

Kamiya discloses a sheet processing apparatus aligning and stacking a sheet comprising:

a stacking means (4) for stacking the sheet or sheet bundle;

a conveying means (71) for conveying the sheet or sheet bundle toward the stacking means;

a sheet rear end aligning means (70) for aligning rear end of the sheet or sheet bundle upon pressing toward the stacking means the rear end of the sheet or sheet bundle conveyed by the conveying means (col. 7, lines 52 et seq.; see also Fig. 4); and

a controlling means (600) for controlling operation of the sheet rear end aligning means,

Art Unit: 3653

wherein the controlling means controls the operation of the sheet rear end aligning means so that acceleration of the sheet or sheet bundle by pressing of the sheet rear end aligning means satisfies a relation:

$$a < -\mu_1'g \text{ and } a < -\mu_2'g$$

where acceleration of the sheet or sheet bundle by pressing of the sheet rear end aligning means at a time that the sheet rear end aligning means presses the rear end of the sheet or sheet bundle to align the rear end, is denoted as  $a$  where gravitational acceleration is denoted as  $g$ , where coefficient of kinetic friction between the sheet or sheet bundle pressed by the sheet rear end aligning means and the stacking means is denoted as  $\mu_1'$ , and where coefficient of kinetic friction between the sheet or sheet bundle pressed by the sheet rear end aligning means and the sheet or sheet bundle already stacked on the stacking means is denoted as  $\mu_2'$ .

In regard to claims 2, 3, 7 and 8, Kamiya discloses a processing means capable of temporarily stacking the sheets on the upstream side of the conveyor and stacking means (see Fig. 2) which includes a processing tray (40), an aligning means (62) and a stapler (10).

In regard to claims 4 and 9, Kamiya discloses the stacking means' stacking surface extends substantially horizontally (see Fig. 2).

In regard to claim 5, Kamiya discloses an image forming apparatus (col. 1 line 12) and a sheet processing apparatus (see Fig. 2).

In regard to claim 6, Kamiya discloses an image forming section (col. 1, line 12).

Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,561,709 to McVeigh et al. (*hereinafter* "McVeigh").

Art Unit: 3653

McVeigh discloses a sheet processing apparatus aligning and stacking a sheet comprising:

a stacking means (40) for stacking the sheet or sheet bundle;

a conveying means (33) for conveying the sheet or sheet bundle toward the stacking means;

a sheet rear end aligning means (50) for aligning rear end of the sheet or sheet bundle upon pressing toward the stacking means the rear end of the sheet or sheet bundle conveyed by the conveying means (see Fig. 5-6); and

a controlling means (col. 2, lines 45 et seq.) for controlling operation of the sheet rear end aligning means,

wherein the controlling means controls the operation of the sheet rear end aligning means so that acceleration of the sheet or sheet bundle by pressing of the sheet rear end aligning means satisfies a relation:

$$a < -\mu_1'g \text{ and } a < -\mu_2'g$$

where acceleration of the sheet or sheet bundle by pressing of the sheet rear end aligning means at a time that the sheet rear end aligning means presses the rear end of the sheet or sheet bundle to align the rear end, is denoted as  $a$  where gravitational acceleration is denoted as  $g$ , where coefficient of kinetic friction between the sheet or sheet bundle pressed by the sheet rear end aligning means and the stacking means is denoted as  $\mu_1'$ , and where coefficient of kinetic friction between the sheet or sheet bundle pressed by the sheet rear end aligning means and the sheet or sheet bundle already stacked on the stacking means is denoted as  $\mu_2'$ .

Art Unit: 3653

In regard to claims 2, 3, 7 and 8, McVeigh discloses a processing means capable of temporarily stacking the sheets on the upstream side of the conveyor and stacking means (see Fig. 1) which includes a processing tray (see Fig. 1), an aligning means (32) and a stapler (22).

In regard to claims 4 and 9, McVeigh discloses the stacking means' stacking surface extends substantially horizontally (see Fig. 1).

In regard to claim 5, McVeigh discloses an image forming apparatus (col. 2 line 60) and a sheet processing apparatus (see Fig. 1).

In regard to claim 6, McVeigh discloses an image forming section (col. 2, line 60).

Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 6,302,389 to Kato et al. (*hereinafter* "Kato").

Kato discloses a sheet processing apparatus aligning and stacking a sheet comprising:

a stacking means (80) for stacking the sheet or sheet bundle;

a conveying means (60) for conveying the sheet or sheet bundle toward the stacking means;

a sheet rear end aligning means (60a) for aligning rear end of the sheet or sheet bundle upon pressing toward the stacking means (see e.g. Fig. 10) the rear end of the sheet or sheet bundle conveyed by the conveying means; and

a controlling means (col. 3, line 22) for controlling operation of the sheet rear end aligning means,

wherein the controlling means controls the operation of the sheet rear end aligning means so that acceleration of the sheet or sheet bundle by pressing of the sheet rear end aligning means satisfies a relation:

$$a < -\mu_1'g \text{ and } a < -\mu_2'g$$

where acceleration of the sheet or sheet bundle by pressing of the sheet rear end aligning means at a time that the sheet rear end aligning means presses the rear end of the sheet or sheet bundle to align the rear end, is denoted as  $a$  where gravitational acceleration is denoted as  $g$ , where coefficient of kinetic friction between the sheet or sheet bundle pressed by the sheet rear end aligning means and the stacking means is denoted as  $\mu_1'$ , and where coefficient of kinetic friction between the sheet or sheet bundle pressed by the sheet rear end aligning means and the sheet or sheet bundle already stacked on the stacking means is denoted as  $\mu_2'$ .

In regard to claims 2, 3, 7 and 8, Kato discloses a processing means capable of temporarily stacking the sheets on the upstream side of the conveyor and stacking means (see Fig. 10) which includes a processing tray (30), an aligning means (31) and a stapler (10).

In regard to claims 4 and 9, Kato discloses the stacking means' stacking surface extends substantially horizontally (see Fig. 10).

In regard to claim 5, Kato discloses an image forming apparatus (col. 1 line 9) and a sheet processing apparatus (see Fig. 10).

In regard to claim 6, Kato discloses an image forming section (col. 1, line 9).

Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 6,142,461 to Aaso et al. (*hereinafter* "Aaso").

Art Unit: 3653

Aaso discloses a sheet processing apparatus aligning and stacking a sheet comprising:

a stacking means (26) for stacking the sheet or sheet bundle;

a conveying means (48) for conveying the sheet or sheet bundle toward the stacking means;

a sheet rear end aligning means (31) for aligning rear end of the sheet or sheet bundle upon pressing toward the stacking means the rear end of the sheet or sheet bundle conveyed by the conveying means (col. 11, lines 50 et seq.; see also Fig. 16); and

a controlling means (col. 11, line 11) for controlling operation of the sheet rear end aligning means,

wherein the controlling means controls the operation of the sheet rear end aligning means so that acceleration of the sheet or sheet bundle by pressing of the sheet rear end aligning means satisfies a relation:

$$a < -\mu_1'g \text{ and } a < -\mu_2'g$$

where acceleration of the sheet or sheet bundle by pressing of the sheet rear end aligning means at a time that the sheet rear end aligning means presses the rear end of the sheet or sheet bundle to align the rear end, is denoted as  $a$  where gravitational acceleration is denoted as  $g$ , where coefficient of kinetic friction between the sheet or sheet bundle pressed by the sheet rear end aligning means and the stacking means is denoted as  $\mu_1'$ , and where coefficient of kinetic friction between the sheet or sheet bundle pressed by the sheet rear end aligning means and the sheet or sheet bundle already stacked on the stacking means is denoted as  $\mu_2'$ .



In regard to claims 2, 3, 7 and 8, Kamiya discloses a processing means capable of temporarily stacking the sheets on the upstream side of the conveyor and stacking means (see Fig. 2) which includes a processing tray (24), an aligning means (8b) and a stapler (8).

In regard to claims 4 and 9, Kamiya discloses the stacking means' stacking surface extends substantially horizontally (see Fig. 1).

In regard to claim 5, Kamiya discloses an image forming apparatus (col. 1 line 6) and a sheet processing apparatus (see Fig. 1).

In regard to claim 6, Kamiya discloses an image forming section (col. 1, line 6).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Kohner whose telephone number is 571-272-6939. The examiner can normally be reached on Mon-Fri 9-5:30.

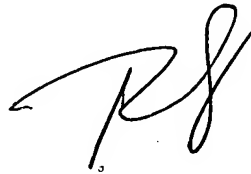
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on 571-272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3653

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Matthew J. Kohner  
Examiner  
Art Unit 3653

mjk

A handwritten signature in black ink, appearing to be 'PM' or similar, written in a cursive style.

**PATRICK MACKEY**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 3600**